

(e) Notwithstanding any other provision of this chapter, an alternate electrical power supply is not required for airborne weather radar equipment.

[Doc. No. 6258, 29 FR 19205, Dec. 31, 1964, as amended by Amdt. 121-18, 31 FR 5825, Apr. 15, 1966; Amdt. 121-130, 41 FR 47229, Oct. 28, 1976; Amdt. 121-251, 60 FR 65932, Dec. 20, 1995]

**§ 121.358 Low-altitude windshear system equipment requirements.**

(a) *Airplanes manufactured after January 2, 1991.* No person may operate a turbine-powered airplane manufactured after January 2, 1991, unless it is equipped with either an approved airborne windshear warning and flight guidance system, an approved airborne detection and avoidance system, or an approved combination of these systems.

(b) *Airplanes manufactured before January 3, 1991.* Except as provided in paragraph (c) of this section, after January 2, 1991, no person may operate a turbine-powered airplane manufactured before January 3, 1991 unless it meets one of the following requirements as applicable.

(1) The makes/models/series listed below must be equipped with either an approved airborne windshear warning and flight guidance system, an approved airborne detection and avoidance system, or an approved combination of these systems:

- (i) A-300-600;
- (ii) A-310—all series;
- (iii) A-320—all series;
- (iv) B-737-300, 400, and 500 series;
- (v) B-747-400;
- (vi) B-757—all series;
- (vii) B-767—all series;
- (viii) F-100—all series;
- (ix) MD-11—all series; and

(x) MD-80 series equipped with an EFIS and Honeywell-970 digital flight guidance computer.

(2) All other turbine-powered airplanes not listed above must be equipped with as a minimum requirement, an approved airborne windshear warning system. These airplanes may be equipped with an approved airborne windshear detection and avoidance system, or an approved combination of these systems.

(c) *Extension of the compliance date.* A certificate holder may obtain an extension

of the compliance date in paragraph (b) of this section if it obtains FAA approval of a retrofit schedule. To obtain approval of a retrofit schedule and show continued compliance with that schedule, a certificate holder must do the following:

(1) Submit a request for approval of a retrofit schedule by June 1, 1990, to the Flight Standards Division Manager in the region of the certificate holding district office.

(2) Show that all of the certificate holder's airplanes required to be equipped in accordance with this section will be equipped by the final compliance date established for TCAS II retrofit.

(3) Comply with its retrofit schedule and submit status reports containing information acceptable to the Administrator. The initial report must be submitted by January 2, 1991, and subsequent reports must be submitted every six months thereafter until completion of the schedule. The reports must be submitted to the certificate holder's assigned Principal Avionics Inspector.

(d) *Definitions.* For the purposes of this section the following definitions apply—

(1) *Turbine-powered airplane* includes, e.g., turbofan-, turbojet-, propfan-, and ultra-high bypass fan-powered airplanes. The definition specifically excludes turbopropeller-powered airplanes.

(2) An airplane is considered manufactured on the date the inspection acceptance records reflect that the airplane is complete and meets the FAA Approved Type Design data.

[Doc. No. 25954, 55 FR 13242, Apr. 9, 1990]

**§ 121.359 Cockpit voice recorders.**

(a) No certificate holder may operate a large turbine engine powered airplane or a large pressurized airplane with four reciprocating engines unless an approved cockpit voice recorder is installed in that airplane and is operated continuously from the start of the use of the checklist (before starting engines for the purpose of flight), to completion of the final checklist at the termination of the flight.

(b) [Reserved]

(c) The cockpit voice recorder required by paragraph (a) of this section

must meet the following application standards:

(1) The requirements of part 25 of this chapter in effect on August 31, 1977.

(2) After September 1, 1980, each recorder container must—

(i) Be either bright orange or bright yellow;

(ii) Have reflective tape affixed to the external surface to facilitate its location under water; and

(iii) Have an approved underwater locating device on or adjacent to the container which is secured in such a manner that they are not likely to be separated during crash impact, unless the cockpit voice recorder, and the flight recorder required by §121.343, are installed adjacent to each other in such a manner that they are not likely to be separated during crash impact.

(d) No person may operate a multien-gine, turbine-powered airplane having a passenger seat configuration of 10–19 seats unless it is equipped with an approved cockpit voice recorder that:

(1) Is installed in compliance with §23.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g); or §25.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g) of this chapter, as applicable; and

(2) Is operated continuously from the use of the checklist before the flight to completion of the final checklist at the end of the flight.

(e) No person may operate a multien-gine, turbine-powered airplane having a passenger seat configuration of 20 to 30 seats unless it is equipped with an approved cockpit voice recorder that—

(1) Is installed in accordance with the requirements of §23.1457 (except paragraphs (a)(6), (d)(1)(ii), (4), and (5)) or §25.1457 (except paragraphs (a)(6), (d)(1)(ii), (4), and (5)) of this chapter, as applicable; and

(2) Is operated continuously from the use of the checklist before the flight to completion of the final checklist at the end of the flight.

(f) In complying with this section, an approved cockpit voice recorder having an erasure feature may be used, so that at any time during the operation of the recorder, information recorded more than 30 minutes earlier may be erased or otherwise obliterated.

(g) For those aircraft equipped to record the uninterrupted audio signals received by a boom or a mask microphone, the flight crewmembers are required to use the boom microphone below 18,000 feet mean sea level. No person may operate a large turbine engine powered airplane or a large pressurized airplane with four reciprocating engines manufactured after October 11, 1991, or on which a cockpit voice recorder has been installed after October 11, 1991, unless it is equipped to record the uninterrupted audio signal received by a boom or mask microphone in accordance with §25.1457(c)(5) of this chapter.

(h) In the event of an accident or occurrence requiring immediate notification of the National Transportation Safety Board under part 830 of its regulations, which results in the termination of the flight, the certificate holder shall keep the recorded information for at least 60 days or, if requested by the Administrator or the Board, for a longer period. Information obtained from the record is used to assist in determining the cause of accidents or occurrences in connection with investigations under part 830. The Administrator does not use the record in any civil penalty or certificate action.

(i) By April 7, 2012, all turbine engine-powered airplanes subject to this section that are manufactured before April 7, 2010, must have a cockpit voice recorder installed that also—

(1) Meets the requirements of §23.1457(d)(6) or §25.1457(d)(6) of this chapter, as applicable;

(2) Retains at least the last 2 hours of recorded information using a recorder that meets the standards of TSO-C123a, or later revision; and

(3) Is operated continuously from the use of the checklist before the flight to completion of the final checklist at the end of the flight.

(4) If transport category, meets the requirements in §25.1457(a)(3), (a)(4), and (a)(5) of this chapter.

(j) All turbine engine-powered airplanes subject to this section that are manufactured on or after April 7, 2010, must have a cockpit voice recorder installed that also—

(1) Is installed in accordance with the requirements of §23.1457 (except for

paragraph (a)(6) or § 25.1457 (except for paragraph (a)(6)) of this chapter, as applicable;

(2) Retains at least the last 2 hours of recorded information using a recorder that meets the standards of TSO-C123a, or later revision; and

(3) Is operated continuously from the use of the checklist before the flight to completion of the final checklist at the end of the flight.

(4) For all airplanes manufactured on or after December 6, 2010, also meets the requirements of § 23.1457(a)(6) or § 25.1457(a)(6) of this chapter, as applicable.

(k) All airplanes required by this part to have a cockpit voice recorder and a flight data recorder, that install datalink communication equipment on or after December 6, 2010, must record all datalink messages as required by the certification rule applicable to the airplane.

[Doc. No. 6258, 29 FR 19205, Dec. 31, 1964]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 121.359, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.fdsys.gov](http://www.fdsys.gov).

#### § 121.360 [Reserved]

### Subpart L—Maintenance, Preventive Maintenance, and Alterations

SOURCE: Docket No. 6258, 29 FR 19210, Dec. 31, 1964, unless otherwise noted.

#### § 121.361 Applicability.

(a) Except as provided by paragraph (b) of this section, this subpart prescribes requirements for maintenance, preventive maintenance, and alterations for all certificate holders.

(b) The Administrator may amend a certificate holder's operations specifications to permit deviation from those provisions of this subpart that would prevent the return to service and use of airframe components, powerplants, appliances, and spare parts thereof because those items have been maintained, altered, or inspected by persons employed outside the United States who do not hold U.S. airman certificates. Each certificate holder

who uses parts under this deviation must provide for surveillance of facilities and practices to assure that all work performed on these parts is accomplished in accordance with the certificate holder's manual.

[Doc. No. 8754, 33 FR 14406, Sept. 25, 1968]

#### § 121.363 Responsibility for airworthiness.

(a) Each certificate holder is primarily responsible for—

(1) The airworthiness of its aircraft, including airframes, aircraft engines, propellers, appliances, and parts thereof; and

(2) The performance of the maintenance, preventive maintenance, and alteration of its aircraft, including airframes, aircraft engines, propellers, appliances, emergency equipment, and parts thereof, in accordance with its manual and the regulations of this chapter.

(b) A certificate holder may make arrangements with another person for the performance of any maintenance, preventive maintenance, or alterations. However, this does not relieve the certificate holder of the responsibility specified in paragraph (a) of this section.

[Doc. No. 6258, 29 FR 19210, Dec. 31, 1964, as amended by Amdt. 121-106, 38 FR 22378, Aug. 20, 1973]

#### § 121.365 Maintenance, preventive maintenance, and alteration organization.

(a) Each certificate holder that performs any of its maintenance (other than required inspections), preventive maintenance, or alterations, and each person with whom it arranges for the performance of that work must have an organization adequate to perform the work.

(b) Each certificate holder that performs any inspections required by its manual in accordance with § 121.369(b)(2) or (3) (in this subpart referred to as *required inspections*) and each person with whom it arranges for the performance of that work must have an organization adequate to perform that work.

(c) Each person performing required inspections in addition to other maintenance, preventive maintenance, or